

Appln. No. 10/551,263
Amd. dated March 8, 2011
Reply to Office Action of December 8, 2010

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-5 **(Cancelled)**

6. **(Previously Presented)** A modified Staphylococcal enterotoxin B (SEB) having a reduced reactivity with a neutralizing antibody to SEB (anti-SEB antibody), wherein the amino acid sequence from residue position 226 to residue position 229 in the amino acid sequence of SEB as shown in SEQ ID NO:1 is Ala Thr Thr Gln.

7. **(Previously Presented)** A modified Staphylococcal enterotoxin B (SEB) having a reduced reactivity with a neutralizing antibody to SEB (anti-SEB antibody), wherein the amino acid sequence from residue position 226 to residue position 229 in the amino acid sequence of SEB as shown in SEQ ID NO:1 is Lys Arg Ile Ile.

8. **(Previously Presented)** A modified Staphylococcal enterotoxin B (SEB) having a reduced reactivity with a neutralizing antibody to SEB (anti-SEB antibody), wherein Asn at

Appln. No. 10/551,263
Amd. dated September 29, 2010
Reply to Office Action of March 31, 2010

residue position 23 in the amino acid sequence of SEB as shown in
SEQ ID NO: 1 is substituted with Tyr.

Claims 9-15. **(Cancelled)**

16. **(Previously Presented)** The modified SEB of claim 6,
wherein Asn at residue position 23 in the amino acid sequence of
SEB as shown in SEQ ID NO: 1 is substituted with Tyr.

17. **(Previously Presented)** The modified SEB of claim 7,
wherein Asn at residue position 23 in the amino acid sequence of
SEB as shown in SEQ ID NO: 1 is substituted with Tyr.

Claims 18-20 **(Cancelled)**.

21. **(Currently Amended)** A modified Staphylococcal
enterotoxin B (SEB), having a reduced reactivity with a
neutralizing antibody to SEB (anti-SEB antibody), and capable of
being expressed in a soluble form in *Escherichia coli* so as to be
maintained stably in an aqueous solution and which modified SEB
retains a therapeutic effect to rheumatoid arthritis-immunopathy
~~equivalent to that of naturally occurring SEB,~~

wherein the reactivity with anti-SEB antibody is reduced
as a result of amino acid substitution at residue positions 226 to
229 of SEQ ID NO: 1, with the amino acid sequence at residue

Appln. No. 10/551,263
Amd. dated September 29, 2010
Reply to Office Action of March 31, 2010

positions 226 to 229 of SEQ ID NO:1 being substituted with Ala Thr
Thr Gln, respectively, or substituted with Lys Arg Ile Ile,
respectively, and

wherein Asn at residue position 23 of SEQ ID NO:1 is
substituted with Tyr.

Claim 22 (**Cancelled**)

23. (**Withdrawn**) In a method for the treatment of
rheumatoid arthritis comprising administration to a patient in
need thereof an effective amount of a treatment agent, the
improvement wherein

the treatment agent comprises the modified SEB of
claim 21.